

IN THE CLAIMS

Please **amend** claims 1, 2, 4, 5, 7, and 8, and **add** new claims 16-36. No new matter has been added.

1. (Currently Amended) A module for an optical device ~~being provided with~~
,comprising:
a solid-state image sensor having an effective pixel region formed on one side thereof ~~and an optical path demarcating unit for demarcating an optical path from an objective lens to said effective pixel region,~~
~~comprising:~~
an objective lens;
a lens holder for supporting said objective lens at a position opposite said effective pixel region and demarcating an optical path from said objective lens to said effective pixel region;
a ~~translucent~~ transparent cover placed opposite ~~to~~ said effective pixel region ~~on said solid-state image sensor;~~
a bonding portion having substantially uniform thickness for fixedly bonding said ~~translucent~~ transparent cover to said solid-state image sensor so as to form a sealed space enclosing said effective pixel region between said one side of said solid-state image sensor and said transparent cover; and
a joint portion for fixedly joining said lens holder ~~optical path demarcating unit~~ to said ~~translucent~~ transparent cover; wherein ~~whereby~~ said objective lens is positioned via said joint portion and said bonding portion with respect to said effective pixel region with the said one side of said solid-state image sensor defined as a positioning reference, and

said bonding portion consists of a bonding agent having substantially uniform thickness and formed by patterning on said one side of said solid-state image sensor in a shape enclosing said effective pixel region, or on the surface of said transparent cover opposite said one side of said solid-state image sensor in a shape enclosing said effective pixel region when said transparent cover is placed opposite said effective pixel region. ~~by fixedly joining said optical path demarcating unit to said translucent cover via said joint portion, and by fixedly bonding said translucent cover to said solid-state image sensor via said bonding portion.~~

2. (Currently Amended) The module for an optical device as set forth in claim 1, wherein said transparent cover is formed to have a plane size smaller than the plane size of said one side of said solid-state image sensor. ~~joint portion is joined by fixedly bonding said translucent cover and said optical path demarcating unit.~~

3. (Currently Amended) The module for an optical device as set forth in claim 2, comprising:
an image processing device; and
a wiring substrate, wherein
said image processing device is bonded to said wiring substrate,
and
~~translucent cover is formed to have a plane size smaller than the plane size of the one side of said solid-state image sensor, is~~
bonded to a plane portion of said image processing device.

4. (Currently Amended) The module for an optical device as set forth in claim 31, wherein said patterning of said bonding portion is performed by removing unnecessary portion of a ~~contains a~~ photosensitive bonding agent coated with substantially uniform thickness on said one side of said solid-state image sensor, or on the surface of said transparent cover opposite said one side of said solid-state image sensor.
5. (Currently Amended) The module for an optical device as set forth in claim 4, wherein said transparent cover is formed to have a plane size smaller than the plane size of said one side of said solid-state image sensor ~~a space is formed between said effective pixel region and said translucent cover, and~~ said bonding portion is formed at the peripheral portion of said effective pixel region on the one side of said solid-state image sensor.

6. (Currently Amended) The module for an optical device as set forth in claim 5, comprising:

an image processing device; and

a wiring substrate, wherein

said image processing device is bonded to said wiring substrate, and

said solid-state image sensor is bonded to a plane portion of

said image processing device, bonding portion is

configured to seal said space formed between said

effective pixel region and said translucent cover.

7. (Currently Amended) The module for an optical device as set forth in claim

61, wherein said patterning of said bonding portion is performed

by printing a bonding agent in a frame-like shape with

substantially uniform thickness on said one side of said solid-

state image sensor, or on the surface of said transparent cover

opposite said one side of said solid-state image sensor, lens is

placed so as to oppose to said effective pixel region, and is held by

said optical path demarcating unit.

8. (Currently Amended) The module for an optical device as set forth in claim 7,

wherein said transparent cover is formed to have a plane size

smaller than the plane size of said one side of said solid-state

image sensor.

an image processing device is bonded to a wiring substrate, and

said solid-state image sensor is bonded to a plane portion of said

image processing device.

9. (Currently Amended) The module for an optical device as set forth in claim 8,
comprising:

an image processing device; and

a wiring substrate, wherein

said image processing device is bonded to said wiring
substrate, and

said solid-state image sensor is bonded to a plane portion of
said image processing device.~~being used as a module~~
~~for a camera.~~

10. (Withdrawn) A manufacturing method of a module for an optical device
being provided with a solid-state image sensor having an effective
pixel region formed on one side thereof, and an optical path
demarcating unit for demarcating an optical path to said effective
pixel region, comprising steps of:

placing a translucent cover so as to oppose to said effective
pixel region;

bonding said translucent cover to said solid-state image
sensor; and

joining said optical path demarcating unit to said
translucent cover.

11. (Withdrawn) The manufacturing method of a module for an optical device as
set forth in claim 10, wherein the step of joining said optical path
demarcating unit to said translucent cover is executed by bonding
said translucent cover and said optical path demarcating unit.

12. (Withdrawn) The manufacturing method of a module for an optical device as set forth in claim 11, wherein a photosensitive bonding agent is used for bonding said solid-state image sensor and said translucent cover.
13. (Withdrawn) The manufacturing method of a module for an optical device as set forth in claim 12, wherein bonding of said solid-state image sensor and said translucent cover is executed by patterning said photosensitive bonding agent at the peripheral portion of said effective pixel region on the one side of said solid-state image sensor.
14. (Withdrawn) The manufacturing method of a module for an optical device as set forth in claim 13, further comprising a step of bonding said solid-state image sensor to a plane portion of an image processing device bonded to a wiring substrate.
15. (Withdrawn) The manufacturing method of a module for an optical device as set forth in claim 14, wherein said module for an optical device is used as a module for a camera.

16 (New) The module for an optical device as set forth in claim 1, wherein said patterning of said bonding portion is performed by affixing an adhesive sheet formed in a frame-like shape with substantially uniform thickness on said one side of said solid-state image sensor, or on the surface of said transparent cover opposite said one side of said solid-state image sensor.

17 (New) The module for an optical device as set forth in claim 16, wherein said transparent cover is formed to have a plane size smaller than the plane size of said one side of said solid-state image sensor.

18 (New) The module for an optical device as set forth in claim 17, comprising:
an image processing device; and
a wiring substrate, wherein
said image processing device is bonded to said wiring substrate, and
said solid-state image sensor is bonded to a plane portion of said image processing device.

19. (New) The module for an optical device as set forth in claim 1, wherein said patterning of said bonding portion is performed by coating a bonding agent with use of dispense method in a frame-like shape with substantially uniform thickness on said one side of said solid-state sensor, or on the surface of said transparent cover opposite said one side of said solid-state image sensor.

20. (New) The module for an optical device as set forth in claim 19, wherein said transparent cover is formed to have a plane size smaller than the plane size of said one side of said solid-state image sensor.
21. (New) The module for an optical device as set forth in claim 20, comprising:
an image processing device; and
a wiring substrate, wherein
said image processing device is bonded to said wiring substrate,
and
said solid-state image sensor is bonded to a plane portion of said image processing device.

22 (New) A method for manufacturing a module for an optical device comprising a solid-state image sensor having an effective pixel region formed on one side thereof; an objective lens; a lens holder for supporting said objective lens at a position opposite said effective pixel region and demarcating an optical path from said objective lens to said effective pixel region; a transparent cover placed opposite said effective pixel region; a bonding portion having substantially uniform thickness for fixedly bonding said transparent cover to said solid-state image sensor so as to form a sealed space enclosing said effective pixel region between said one side of said solid-state image sensor and said transparent cover; and a joint portion for fixedly joining said lens holder to said transparent cover; wherein said objective lens is positioned via said joint portion and said bonding portion with respect to said effective pixel region with said one side of said solid-state image sensor defined as a positioning reference, comprising step of:
forming said bonding portion by patterning a bonding agent with substantially uniform thickness on said one side of said solid-state image sensor in a shape enclosing said effective pixel region, or on the surface of said transparent cover opposite said one side of said solid-state image sensor in a shape enclosing said effective pixel region when said transparent cover is placed opposite said effective pixel region.

23 (New) The method as set forth in claim 22, further comprising the step of forming said transparent cover so as to have a plane size smaller than the plane size of said one side of said solid-state image sensor.

24 (New) The method as set forth in claim 23, further comprising steps of:

bonding an image processing device to a wiring substrate, and
bonding said solid-state image sensor to a plane portion of said
image processing device.

25 (New) The method as set forth in claim 22, wherein said step of forming said
bonding portion further includes steps of:

coating a photosensitive bonding agent with substantially uniform
thickness on said one side of said solid-state image sensor,
or on the surface of said transparent cover opposite said
one side of said solid-state image sensor; and

removing, with use of photolithography, unnecessary portion of
said photosensitive bonding agent coated on said one side
of said solid-state image sensor, or on the surface of said
transparent cover opposite said one side of said solid-state
image sensor.

26 (New) The method as set forth in claim 25, further comprising step of
forming said transparent cover so as to have a plane size smaller
than the plane size of said one side of said solid-state image
sensor.

27 (New) The method as set forth in claim 26, further comprising steps of:

bonding an image processing device to a wiring substrate, and
bonding said solid-state image sensor to a plane portion of said
image processing device.

28 (New) The method as set forth in claim 22, wherein said step of forming said bonding portion is performed by printing a bonding agent in a frame-like shape with substantially uniform thickness on said one side of said solid-state image sensor, or on the surface of said transparent cover opposite said one side of said solid-state image sensor.

29 (New) The method as set forth in claim 28, further comprising step of forming said transparent cover so as to have a plane size smaller than the plane size of said one side of said solid-state image sensor.

30 (New) The method as set forth in claim 29, further comprising steps of:
bonding an image processing device to a wiring substrate, and
bonding said solid-state image sensor to a plane portion of said image processing device.

31 (New) The method as set forth in claim 22, wherein said step of forming said bonding portion is performed by affixing an adhesive sheet formed in a frame-like shape with substantially uniform thickness on said one side of said solid-state image sensor, or on the surface of said transparent cover opposite said one side of said solid-state image sensor.

32 (New) The method as set forth in claim 31, further comprising step of forming said transparent cover so as to have a plane size smaller than the plane size of said one side of said solid-state image sensor.

33 (New) The method as set forth in claim 32, further comprising steps of:
bonding an image processing device to a wiring substrate, and
bonding said solid-state image sensor to a plane portion of said image processing device.

34 (New) The method as set forth in claim 22, wherein said step of forming said bonding portion is performed by coating a bonding agent with use of dispense method in a frame-like shape with substantially uniform thickness on said one side of said solid-state image sensor, or on the surface of said transparent cover opposite said one side of said solid-state image sensor.

35 (New) The method as set forth in claim 34, further comprising step of forming said transparent cover so as to have a plane size smaller than the plane size of said one side of said solid-state image sensor.

36 (New) The method as set forth in claim 35, further comprising steps of:
bonding an image processing device to a wiring substrate, and
bonding said solid-state image sensor to a plane portion of said image processing device.